

This Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A composite aluminum alloy structure comprising:
a core layer including between about 0.1-0.3% Mg and between about 0.15-0.5% Si;
a water-side liner on one side of said core layer, said water-side liner comprised of between about 0.2-0.5% Si, between about 1.3-2.5% Mg, between about 2.5-5.0% Zn, less than about 0.1% Cu but greater than 0% Cu, less than about 0.25% Mn but greater than 0% Mn and less than about 0.35% Fe, with the remainder comprising Al and tolerable impurities; and
a braze liner on the other side of said core layer,
wherein following a brazing operation on said composite aluminum alloy structure, said Mg in said core layer and said water-side liner in combination with said Si from all components of said composite aluminum alloy, including said braze liner, imparts natural age hardening of said composite aluminum alloy structure at room temperature.
2. (Currently Amended) The composite aluminum alloy structure of claim 1 wherein said core layer is comprised of between about 0.5-1.3% Mn, between about 0.1-0.3% Mg, between about 0.4-0.7% Cu, between about 0.15-0.5% Si, between about 0.1-0.25% Ti and less than about 0.5% Fe but greater than 0% Fe, with the remainder comprising Al and tolerable impurities.
3. (Original) The composite aluminum alloy structure of claim 2 wherein said braze liner is made from a brazing filler metal made from an Al-Si-base alloy.
4. (Original) The composite aluminum alloy structure of claim 2 wherein said core layer is comprised of between about 0.5-1.0% Mn, between about 0.1-0.2% Mg, between about 0.5-0.7% Cu, between about 0.15-0.28% Si, between about 0.1-0.2% Ti and less than about 0.25% Fe, with the remainder comprising Al and tolerable impurities.
5. (Original) The composite aluminum alloy structure of claim 1 wherein said water-side liner is comprised of between about 0.2-0.35% Si, less than about 0.05% Cu, less than about 0.05% Mn, between about 1.3-2.0% Mg, less than about 0.2% Fe and between about 3.0-4.5% Zn, with the remainder comprising Al and tolerable impurities.
6. (Original) The composite aluminum alloy structure of claim 1 wherein said composite aluminum alloy structure is structured for use in a heat exchanger.
7. (Original) The composite aluminum alloy structure of claim 1 wherein said

water-side liner is between about 5-30% of the total thickness of said structure and said braze liner is between about 5-20% of the total thickness, with the core comprising the remaining thickness.

8. (Original) The composite aluminum alloy structure of claim 1 wherein said composite aluminum alloy structure is a tubular shape.

9. (Currently Amended) The composite aluminum alloy structure of claim 8 wherein said core layer is comprised of between about 0.5-1.3% Mn, between about 0.1-0.3% Mg, between about 0.4-0.7% Cu, between about 0.15-0.5% Si, between about 0.1-0.25% Ti and less than about 0.5% Fe but greater than 0% Fe, with the remainder comprising Al and tolerable impurities.

10. (Original) The composite aluminum alloy structure of claim 9 wherein said braze liner is made from a brazing filler metal made from an Al-Si-base alloy.

11. (Currently Amended) A composite aluminum alloy tubestock for use with a heat exchanger, said tubestock comprising:

a core having a first side and a second side, said core comprised of between about 0.5-1.3% Mn, between about 0.1-0.3% Mg, between about 0.4-0.7% Cu, between about 0.15-0.5% Si, between about 0.1-0.25% Ti and less than about 0.5% Fe, with the remainder comprising Al and tolerable impurities;

a water-side liner on said first side of said core, said water-side liner comprised of between about 0.2-0.5% Si, less than about 0.1% Cu but greater than 0% Cu, less than about 0.25% Mn but greater than 0% Mn, less than about 0.35% Fe, between about 1.3-2.5% Mg and between about 2.5-5.0% Zn, with the remainder comprising Al and tolerable impurities; and

a braze liner on said second side of said core, said braze liner comprised of a brazing filler metal consisting of an Al-Si-base alloy,

wherein following a brazing operation on said composite aluminum alloy tubestock, said Mg in said core layer and said water-side liner in combination with said Si from all components of said composite aluminum alloy tubestock impart natural age hardening of said composite aluminum alloy tubestock at room temperature.

12. (Original) The tubestock of claim 11 wherein said Ti content in said core material is between about 0.1-0.2%.

13. (Original) The tubestock of claim 11 wherein the Mn content in said core material is between about 0.5-1.0%.

14. (Original) The tubestock of claim 11 wherein the Si content in said core material is between about 0.15-0.28%.

15. (Original) The tubestock of claim 11 wherein the Mg content in said core material is between about 0.1-0.2%.

16. (Original) The tubestock of claim 11 wherein the Cu content in said core material is between about 0.5-0.7%.

17. (Original) The tubestock of claim 11 wherein the Fe content in said core material is less than about 0.25%.

18. (Canceled)

19. (Original) The tubestock of claim 11 wherein the Zn content in said water-side liner is between about 3.0-4.5%.

20. (Original) The tubestock of claim 11 wherein the Mg content in said water-side liner is between about 1.3-2.0%.

21. (Canceled)

22. (Original) The tubestock of claim 11 wherein the Si content in said water-side liner is between about 0.2-0.35%.

23. (Original) The tubestock of claim 11 wherein the Fe content in said water-side liner is less than about 0.2%.

24. (Original) The tubestock of claim 11 wherein said tubestock is structured to be formed into a substantially tubular member with an interior and an exterior; wherein said water-side liner is disposed on the interior of said substantially tubular member; and wherein said braze liner is disposed on the exterior of said substantially tubular member.

25. (Original) The tubestock of claim 11 wherein said water-side liner is between about 5-30% of the total thickness of said tubestock and said braze liner is between about 5-20% of the total thickness, with the core comprising the remaining thickness.

26. (Original) The tubestock of claim 11 wherein said tubestock is of a tubular shape.

27. (Original) The tubestock of claim 26 wherein said core layer is comprised of between about 0.5-1.0% Mn, between about 0.1-0.2% Mg, between about 0.5-0.7% Cu, between about 0.15-0.28% Si, between about 0.1-0.2% Ti and less than about 0.25% Fe, with the remainder comprising Al and tolerable impurities.

28. (Currently Amended) The tubestock of claim 26 wherein said water-side liner is comprised of between about 0.2-0.35% Si, between about 1.3-2.0% Mg, between

about 3.0-4.5% Zn, less than about 0.05% Cu, less than about 0.05% Mn and less than about 0.2% Fe but greater than 0% Fe, with the remainder comprising Al and tolerable impurities.